

Maine Diabetes Prevention & Control Program

Diabetes: A Growing Epidemic in Maine

As many as one out of every nine Maine adults may have diabetes

- The 2000 U.S. census estimates Maine's adult population to be 973,685.²
- Recent survey data estimate that 7.4% of the adult population in Maine is diagnosed with diabetes.¹ Based on these data we estimate 72,053 adults in Maine are diagnosed with diabetes.
- For every two people diagnosed with diabetes, there is one person that has the disease but has not yet been diagnosed. It is estimated that 36,027 (3.7%) Maine adults have diabetes but have not yet been diagnosed.

Based on these estimates, 108,080 Maine adults have diabetes.

Pre-diabetes (impaired fasting glucose or impaired glucose tolerance) may affect two out of every ten adults in Maine

Before type 2 diabetes develops there is a period of several years when blood-sugar levels are higher than normal but not yet at levels for the diagnosis of diabetes. This condition is called Pre-diabetes.

- Pre-diabetes raises cardiovascular risks by 50%.
- New data estimates that 40% of people ages 40 to 74 have pre-diabetes³. In Maine, this would amount to 201,834 people.
- Studies have shown that about 11% of pre-diabetes converts to diabetes in 3 years⁴. Based on 2000 census data 22,202 Maine adults would be affected, averaging 7,400 people developing diabetes a year.

Research studies have found that modest lifestyle changes can prevent or delay the onset of type 2 diabetes among high-risk adults. The Diabetes Prevention Program (DPP) was the first major trial to show that diet and exercise can effectively delay diabetes in a diverse American population of overweight people with high blood glucose levels.



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Long Term Complications

Cardiovascular Disease (CVD)

The risk of cardiovascular disease (CVD) and stroke are 2 to 4 times higher in people with diabetes.

- In 2002, 1 in 5 persons with diagnosed diabetes were hospitalized for CVD compared to 1 in 8 persons without diabetes.

Non-Traumatic Lower Extremity Amputations (LEAs)

Diabetes is the leading cause of non-traumatic lower extremity amputations (LEAs).

- For years 2000-2002, three out of four LEAs in Maine were diabetes related with twice as many men than women having amputations.

Diabetic Retinopathy

It is estimated that 25,670 people in Maine, ages 18 and older, have diabetic retinopathy.

- This figure represents 1 in 3 persons with diabetes in Maine having retinopathy.

Source: National Eye Institute based on 2000 U.S. Census data.

End Stage Renal Disease

Diabetes is the leading cause of end-stage renal disease (ESRD).

- Data from the U.S. Renal Disease System for 1997 – 2001 shows that Maine's rates for persons with diabetes initiating treatment increased from 8.2/100,000 in 1997 to 9.7/100,000 in 2001.
- 43% of all newly diagnosed chronic ESRD patients in Maine had a diagnosis of diabetes in 2002.

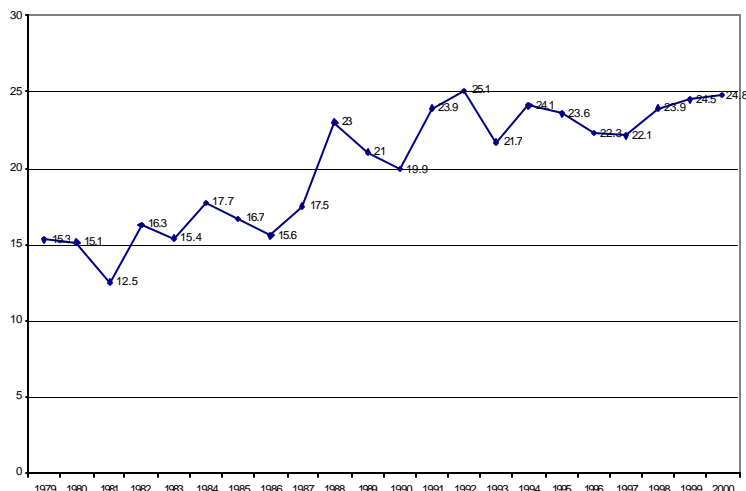
Source: ESRD Network of New England. Statistical Highlights, 2003. Network SIMS Database.

Diabetes Related Hospitalizations are Increasing

Diabetes related hospitalizations increased 13% from 148.50/10,000 in 1996 to 167.69/10,000 in 2002 in Maine.

Deaths Attributed to Diabetes are Rising

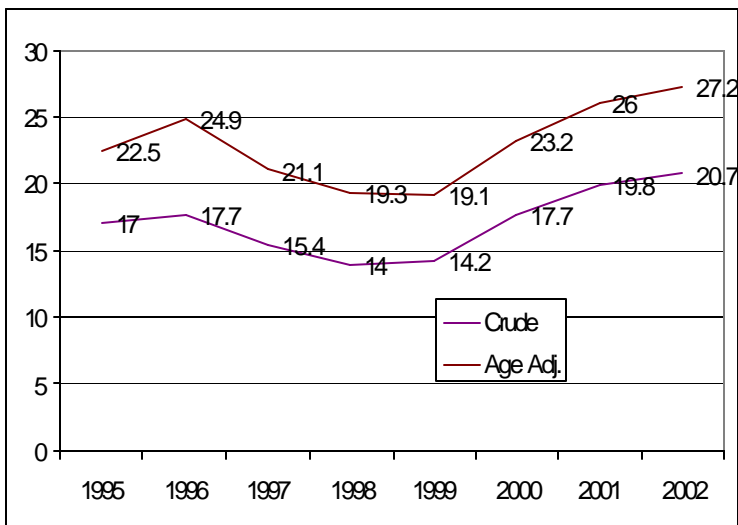
Data from the state of Maine's mortality records from 1979 through 2000 shows a 62% increase in deaths attributed to diabetes. Although the increase is substantial, the actual number of diabetes related deaths is probably much greater. Diabetes has been noted to be under-reported on death certificates.



Diabetes and Smoking

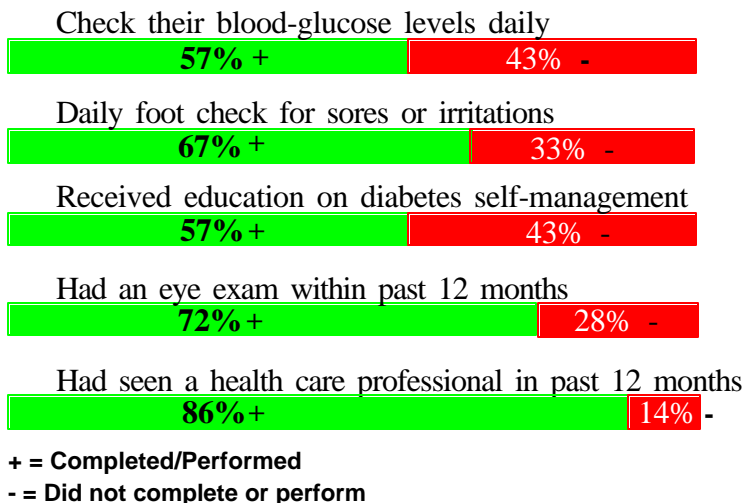
Diabetes damages the vascular system. When people with diabetes engage in smoking the risks of developing cardiovascular disease rises dramatically. Maine has the highest rate of smoking among people with diabetes in New England according to results of the Behavioral Risk Factor Surveillance System (BRFSS). In 2002, the age adjusted rate in Maine was 27.2%. Smoking rates among people with diabetes are higher than adult general population without diabetes.

Rates of Smoking Among People Diagnosed With Diabetes in Maine



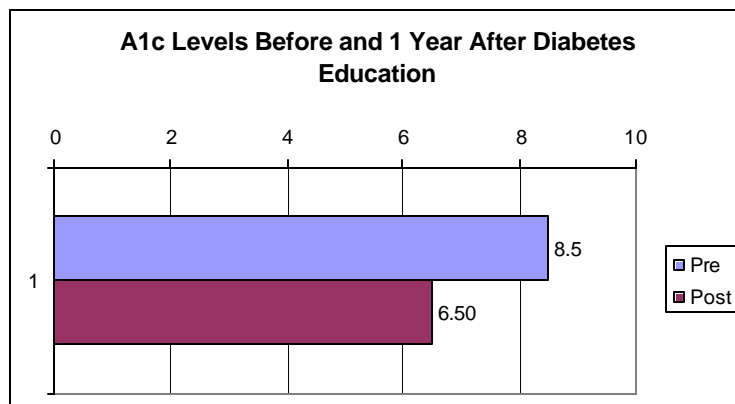
Preventative Practices

Many complications from diabetes can be avoided or reduced through self-management and regularly scheduled medical consultations that focus on diabetes care. According to 3 years of BRFSS survey data (2000- 2002) of people with diagnosed diabetes:



Diabetes Education

Diabetes education has been shown to improve clinical outcomes. Data reported to the Maine Diabetes Prevention and Control Program (DPCP) from 1998-2002 showed consistent decreases in mean A1c measurements on paired data taken prior to diabetes education and then at one year after completion of the program. A1c levels below 7% is a target for glycemic control.



Total number of records analyzed was 4,696. The results were significant. Only participants that completed the entire diabetes education program with valid clinical measures were included in this analysis.

Technical Notes

¹ Behavioral Risk Factor Surveillance System, Maine – 2002 survey. Centers for Disease Control and Prevention.

² U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary File, Tables PL1, PL2, PL3, and PL4.

³ T. Thompson, U.S. Health and Human Services Department, 2004.

⁴ Diabetes Prevention Program (2001)